

## Abstract

A position of a speaker is detected two-dimensionally or three-dimensionally, and a sound field is corrected. A sound reproducing apparatus includes a measuring signal  
5 generating portion for generating a first measuring signal, a transmission portion for transmitting a second measuring signal as soon as the first measuring signal is generated, sensors disposed in a listening position and for measuring a time difference between a time instant when the second  
10 measuring signal was received and a time instant when a measuring sound wave radiated from a to-be-detected speaker in accordance with the first measuring signal was received, and a position calculating portion for calculating a distance, as to each of  $n$  sensors, between each of the  $n$  sensors and  
15 the to-be-detected speaker based on the measured time difference, and calculating the position of the to-be-detected speaker based on distances among the  $n$  sensors and the calculated distance.